

## REMARKS/ARGUMENT

Claims 1-9, 11-14, and 21-25 were pending. Applicant proposes to amend claims 1, 5, 6, and 22. Accordingly, claims 1-9, 11-14, and 21-25 will remain pending upon entry of the present amendment.

Claims 1-9, 11-14, and 21-25 have been rejected under 35 U.S.C. § 103(b) as being unpatentable over Kong et al. (CN Pat. No. 1065488). Applicant respectfully traverses the rejection.

The present invention as recited in claim 1, amended as proposed, is a process for the production of a cereal wort or beer having a high content of soluble  $\beta$ -glucan of more than 0.2 wt% from a cereal or mixture of cereals in which of any ingredient employed in the process will not decrease soluble  $\beta$ -glucan by more than 20 wt% compared to the yield from the corresponding source of non-germinated cereal or mixture of cereals. The process includes the steps of treating at least one cereal to reduce  $\beta$ -glucanase activity in the treated cereal, and forming an aqueous cereal slurry containing from 10% to 30% by weight of the treated cereal. The slurry is mashed at a temperature above 50°C in the presence of at least one starch degrading enzyme and at least one protein degrading enzyme.

In contrast to the present invention as recited in claim 1, amended as proposed, Kong et al. does not teach or suggest a step of treating a cereal to reduce its  $\beta$ -glucanase activity. Moreover, Kong et al. does not teach or suggest a process in which the  $\beta$ -glucanase activity of any ingredient employed in the process will not decrease soluble  $\beta$ -glucan by more than 20% by weight. On the contrary, the process disclosed by Kong et al. is intended to produce a beer that is free from carcinogens by avoiding the use of barley malt, which is said to contain nitrosodimethylamine, by a rapid, inexpensive and continuous production process. Thus, Kong et al. does not anticipate or render obvious the present invention as recited in amended claim 1, which recites a process for producing beer in which high soluble  $\beta$ -glucan content is maintained.

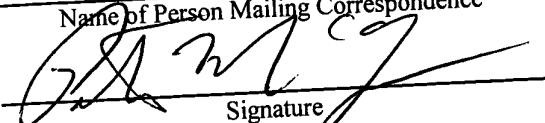
Claim 1, amended as proposed, is submitted as being patentable over the cited prior art, along with its dependent claims 2-9, 11-14, and 23-25. Applicant proposes to amend claim 22 in a manner similar to that of claim 1, and amended claim 22 is submitted as being patentable over the cited reference, along with its dependent claim 21.

The application respectfully is submitted as being in condition for allowance.

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Signature

September 5, 2001

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## APPENDIX B

### VERSION WITH MARKINGS TO SHOW CHANGES MADE

37 C.F.R. § 1.121(b)(iii) AND (c)(ii)

#### CLAIMS:

1. (Amended) A process for the production of a cereal wort or beer having a high content of soluble  $\beta$ -glucan of more than 0.2 wt% from a cereal or mixture of cereals in which of any ingredient employed in the process will not decrease soluble  $\beta$ -glucan by more than 20 wt% compared to the yield from the corresponding source of non-germinated cereal or mixture of cereals, the process comprising the steps of:

treating at least one cereal to reduce  $\beta$ -glucanase activity in the treated cereal;  
forming an aqueous cereal slurry containing from 10% to 30% by weight of the treated [at least one wet or dry milled] cereal, the cereal being wet or dry milled; and  
mashing the slurry at a temperature above 50°C in the presence of at least one starch degrading enzyme and at least one protein degrading enzyme.

5. (Amended) The process of claim [2] 1, wherein the cereal is a malted cereal selected from oats, barley and a mixture thereof[, the cereal having been heat treated to lack  $\beta$ -glucanase activity].

6. (Amended) The process of claim [2] 1, [including] wherein the step of treating the at least one cereal comprises heat treating the cereal sufficiently to [obtain said] lack [of]  $\beta$ -glucanase activity.

22. (Amended) A process for the production of a cereal wort or beer having a high content of soluble  $\beta$ -glucan of more than 0.2 wt% from a cereal or mixture of cereals, the process comprising the steps of:

treating the cereal or mixture of cereals to reduce  $\beta$ -glucanase activity in the treated cereal;  
utilizing enzymes during the process having  $\beta$ -glucanase activity sufficient only to eliminate from the treated cereal or mixture of cereals not more than 50% of soluble  $\beta$ -glucan which is contained before the process is effected in the cereal or mixture of cereals.